

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

- 1 - 2. (Cancelled).
3. (Currently Amended) A method of producing a superconducting wire, comprising the steps of:
  - planarizing a textured metal substrate to have a surface layer extending from a surface thereof to a depth of 300 nm with a crystal axis offset relative to an orientation axis by at most 25°, and a surface roughness  $R_{p\text{v}}$  of at most 150 nm; and
  - depositing a superconducting layer [[(3)]] on said textured metal substrate planarized.
4. (Previously Presented) The method according to claim 3, further comprising the step of thermally treating said textured metal substrate in a reducing atmosphere at least once after the step of planarizing said textured metal substrate and before the step of depositing said superconducting layer on said textured metal substrate planarized.
5. (Previously Presented) The method according to claim 3, further comprising the step of thermally treating said textured metal substrate in a vacuumed atmosphere at least once after the step of planarizing said textured metal substrate and before the step of depositing said superconducting layer on said textured metal substrate planarized.
6. (Previously Presented) The method according to claim 3, wherein the step of planarizing said textured metal substrate is performed by at least one of: mirror finished rolling; mechanochemistry; electrolytic polishing; and chemical polishing.
7. (Previously Presented) The method according to claim 6, further comprising the step of thermally treating said textured metal substrate in a reducing atmosphere at least once after the step of planarizing said textured metal substrate and before the step of depositing said superconducting layer on said textured metal substrate planarized.
8. (Previously Presented) The method according to claim 6, further comprising the step of thermally treating said textured metal substrate in a vacuumed atmosphere at least

once after the step of planarizing said textured metal substrate and before the step of depositing said superconducting layer on said textured metal substrate planarized.

9. (Previously Presented) The method according to claim 3, further comprising the steps of:

depositing an intermediate layer on said textured metal substrate; and  
depositing said superconducting layer on said intermediate layer.

10. (Previously Presented) The method according to claim 9, further comprising the step of thermally treating said textured metal substrate in a reducing atmosphere at least once after the step of planarizing said textured metal substrate and before the step of depositing said intermediate layer on said textured metal substrate planarized.

11. (Previously Presented) The method according to claim 9, further comprising the step of thermally treating said textured metal substrate in a vacuumed atmosphere at least once after the step of planarizing said textured metal substrate and before the step of depositing said intermediate layer on said textured metal substrate planarized.

12. (Previously Presented) The method according to claim 9, wherein the step of planarizing said textured metal substrate is performed by at least one of: mirror finished rolling; mechanochemistry; electrolytic polishing; and chemical polishing.

13. (Previously Presented) The method according to claim 12, further comprising the step of thermally treating said textured metal substrate in a reducing atmosphere at least once after the step of planarizing said textured metal substrate and before the step of depositing said intermediate layer on said textured metal substrate planarized.

14. (Previously Presented) The method according to claim 12, further comprising the step of thermally treating said textured metal substrate in a vacuumed atmosphere at least once after the step of planarizing said textured metal substrate and before the step of depositing said intermediate layer on said textured metal substrate planarized.

15. (New) The method according to claim 3, wherein planarizing the textured metal substrate comprises planarizing the textured metal substrate such that the crystal axis is offset relative to the orientation axis by at most 12°.

16. (New) The method according to claim 3, wherein planarizing the textured metal substrate comprises planarizing the textured metal substrate such that the crystal axis is offset relative to the orientation axis by at most 10°.